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10/014,951	12/11/2001	Brian Spinar	ENSEMB.026A	3656

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EXAMINER

Wilson, Robert W

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,951

Applicant(s)

SPINAR ET AL.

Examiner

Robert W. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-24, 26, 27, 31-34, 37-40, 42, 43, 47-58, 61-63, 67-69 and 72-74 is/are rejected.
- 7) ☒ Claim(s) 9, 25, 29, 30, 35, 36, 41, 44-46, 59, 60, 64-66, 70 and 71 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

1.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.0 Claims 1-8, 10-24, 26-27, 31-34, 37-40, 42-43, & 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Schrader (U.S. Patent No.: 5,896,561)

Referring to claim 1, Schrader teaches: A method of obtaining bandwidth requests from transceivers to a base station for uplink bandwidth per col. 2 lines 7-57. The base station keeps track of level of activity on a channel associated with a transceiver (parameter which varies with time) per col. 2 lines 7-57. The activity level is compared to a threshold which means that the activity level must be inherently stored in order to be compared to a threshold per col. 2 lines 7-57. The base station selects a polling rate associated with dormant state (zero) or for the active state continuous which is broadcast polling or periodic polling per col. 7 line 21-col.8 line 39 wherein the channel activity level compared to a threshold determines whether the state is dormant or active (selecting a polling rate) per col. 2 lines 6-57. The base station periodically polls the transceiver (user) bandwidth requests at the dormant, continuous or periodic rates. The base station continuously compares the channel activity level to the threshold which corresponds to a transceiver or user. The base station changes the polling rate to dormant, continuous or periodic rates based upon the activity level of the channel (parameter) per col. 7 lines 5 line 30-col. 8 line 39.

In addition Schrader teaches:

Regarding claim 2, a plurality of activity levels are compared (plurality of parameters) per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 3, activity level of the channel or common parameter per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 4, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 5, communication between base and transceiver or broadband wireless per col. 2 lines 7-57.

Regarding claim 6, transceivers in the dormant state can poll per col. 7 lines 21-38.

Regarding claim 7, the transceiver per col. 2 lines 7-57 are CPE.

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Regarding claim 8, each transceiver has an inherent connection or individual connection per col. 2 lines 6-57.

Regarding claim 10, the activity level on the channel reflects a previous rate of use of bandwidth by the user per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 11, the activity level on the channel reflects the quality of service requirement per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 12, a plurality of activity levels are compared (plurality of parameters) per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 13, a plurality of activity levels are compared (plurality of parameters) which also reflects previous bandwidth per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 14, activity level of the channel is based on a plurality of parameters per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 15, the activity level reflects quality of previous bandwidth in use and the QoS.

Regarding claim 16, the finite number of polling categories are dormant or active per col. 2 lines 6-57. The polling rates associated with the polling categories are dormant, continuous, and periodic per col. 7 lines 21-col. 9 line 10.

Regarding claim 17, the polling rates associated with the polling categories are dormant, continuous, and periodic per col. 7 lines 21-col. 9 line 10.

Regarding claim 18, the polling rates associated with the polling categories are dormant, continuous, and periodic per col. 7 lines 21-col. 9 line 10.

Regarding claim 19, dormant or zero per col. 4 lines 21-37.

Regarding claim 20, a plurality of activity levels are compared (plurality of parameters) per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 21, CSMA in dormant per col. 4 lines 21-67.

Regarding claim 22, CSMA in dormant & dormant is zero per col. 4 lines 21-67.

Regarding claim 23, while in dormant the transceiver can request a poll (poll-me) per col. 7 lines 21-37

Regarding claim 24, while in dormant the transceiver can request a poll (poll-me) per col. 7 lines 21-37

Regarding claim 26, when activity level increases (common parameters) polling rate changes per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 27, while in dormant the transceiver can request a poll (poll-me) while will lead to a request of broadband wireless data per col. 7 lines 21-37.

Referring to claim 31, Schrader teaches: A method of obtaining bandwidth requests from transceivers to a base station for uplink bandwidth per col. 2 lines 7-57. The base station keeps track of level of activity on a channel associated with a transceiver (parameter which varies with time) per col. 2 lines 7-57. The activity level is compared to a threshold per col. 2 lines 7-57. The base station assigns transceiver to a polling category of dormant state or active state per col. 7 line 21-col. 8 line 39 (polling category). If the polling category is dormant state then the transceiver is polled at a zero rate. If the polling category is continuous then the transceiver is polled at continuous which is broadcast polling or periodic polling per col. 7 line 21-col. 8 line 39 (selecting a polling rate and periodically polling the user). The channel activity level compared to a threshold determines whether the state is dormant or active (assigning a different polling

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category). The base station periodically polls the transceiver (user) bandwidth requests at the dormant, continuous or periodic rates. The base station continuously compares the channel activity level to the threshold which corresponds to a transceiver or user. The base station changes the polling rate to dormant, continuous or periodic rates based upon the activity level of the channel (changing the polling rate).

In addition Schrader teaches”

Regarding claim 32, continuous or broadcast or multicast per col. 7 line 60-col. 8 line 11

Regarding claim 33, active state group assigned to continuous per col. 7 line 60-col. 8 line 11

Regarding claim 34, activity level of channel per col. 2 lines 34-57.

Regarding claim 37, CSMA in dormant per col. 4 lines 21-67

Regarding claim 38, activity level of channel per col. 2 lines 34-57.

Regarding claim 39, active state-continuous per col. 7 lines 21-67.

Regarding claim 40, the system has multiple channels in which a second channel also can have transceivers assigned to active state continuous per col. 7 lines 21-67.

Regarding claim 42, active or dormant state based upon activity level of channel or QoS to a user per col. 2 lines 6-57.

Regarding claim 43, polling rate change based upon activity level per col. 2 lines 6-57.

Referring to claim 43, Schrader teaches: A method of obtaining bandwidth requests from transceivers to a base station for uplink bandwidth per col. 2 lines 7-57. The base station keeps track of level of activity on a channel associated with a transceiver (parameter which varies with time) per col. 2 lines 7-57. The activity level is compared to a threshold per col. 2 lines 7-57. The base station assigns transceiver to a polling group of dormant state or active state per col. 7 line 21-col.8 line 39 (polling category). If the polling group is dormant state then the transceiver is polled at a zero rate. If the polling group is continuous then the transceiver is polled at continuous which is broadcast polling or periodic polling per col. 7 line 21-col.8 line 39 (selecting a polling rate and periodically polling the user). The channel activity level compared to a threshold determines whether the state is dormant or active (assigning a different polling category). The base station periodically polls the transceiver (user) bandwidth requests at the dormant, continuous or periodic rates. The base station continuously compares the channel activity level to the threshold which corresponds to a transceiver or user. The base station changes the polling rate to dormant, continuous or periodic rates based upon the activity level of the channel (changing the polling rate).

In addition Schrader teaches:

Regarding claim 47, the activity level on the channel reflects the quality of service requirement of all users of that channel per col. 2 lines 6-57 & col. 6 lines 1-11.

Claim Rejections - 35 USC § 103

3.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4.0 Claims 48-58, 61-63, 67-69, & 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrader (U.S. Patent No.: 5,896,561)

Referring to claim 48, Schrader teaches: A system of obtaining bandwidth requests from transceivers (users) which share a communication link to the base station (station) for uplink bandwidth per col. 2 lines 7-57. The base station keeps track of level of activity on a channel (parameter) associated with a transceiver (polling policy) per col. 2 lines 7-57. The activity level is compared to a threshold per col. 2 lines 7-57. The base station assigns transceiver to a polling group of dormant state or active state per col. 7 line 21-col.8 line 39 (polling category). If the polling group is dormant state then the transceiver is polled at a zero rate. If the polling group is continuous then the transceiver is polled at continuous which is broadcast polling or periodic polling per col. 7 line 21-col.8 line 39 (direct polling of a user). The base station allocated bandwidth to the transceiver based upon the polled request.

Schrader does not expressly call for: modules but teaches the above limitations.

It is within the level of one skilled in the art at the time of the invention to implement the limitations in logic as modules.

In addition Schrader teaches:

Regarding claim 49, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 50, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 51, activity level of the channel is composite which also previous activity per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 52, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 53, the polling rates associated with the polling categories are dormant, continuous, and periodic per col. 7 lines 21-col. 9 line 10

Regarding claim 54, col. 7 line 21-col. 9 line 11.

Regarding claim 55, col. 7 line 21-col. 9 line 10.

Regarding claim 56, CSMA per col. 4 lines 21-67.

Regarding claim 57, communication between base and transceiver or broadband wireless per col. 2 lines 7-57.

Regarding claim 58, transceivers in the dormant state can poll per col. 7 lines 21-38.

Regarding claim 61, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

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Regarding claim 62, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 63, transceivers in the dormant state can poll per col. 7 lines 21-38.

Regarding claim 67, the finite number of polling categories are dormant or active per col. 2 lines 6-57. The polling rates associated with the polling categories are dormant, continuous, and periodic per col. 7 lines 21-col. 9 line 10.

Referring to claim 68, Schrader teaches: A system of obtaining bandwidth requests from transceivers (users) which share a communication link to the base station (station) for uplink bandwidth per col. 2 lines 7-57. The base station inherently assigns bandwidth upon request to the transceiver (allocation of unrequested bandwidth). The base station keeps track of level of activity on a channel (parameter) associated with a transceiver (polling policy) per col. 2 lines 7-57. The activity level is compared to a threshold per col. 2 lines 7-57. The base station assigns transceiver to a polling group of dormant state or active state per col. 7 line 21-col.8 line 39. If the polling group is dormant state then the transceiver is polled at a zero rate. If the polling group is continuous then the transceiver is polled at continuous which is broadcast polling or periodic polling per col. 7 line 21-col.8 line 39 (assigning a polling category to a user). The channel activity level compared to a threshold determines whether the state is dormant or active (assigning a different polling category). The base station periodically polls the transceiver (user) bandwidth requests at the dormant, continuous or periodic rates. The base station continuously compares the channel activity level to the threshold which corresponds to a transceiver or user. The base station changes the polling rate to dormant, continuous or periodic rates based upon the activity level of the channel (changing the polling rate).

Scharader does not expressly call for: modules but teaches the above limitations.

It is within the level of one skilled in the art at the time of the invention to implement the limitations in logic as modules.

In addition Schrader teaches:

Regarding claim 69, activity level of the channel is composite per col. 2 lines 6-57 & col. 6 lines 1-11.

Regarding claim 72, CSMA in dormant per col. 4 lines 21-67

Regarding claim 73, CSMA in dormant per col. 4 lines 21-67

Regarding claim 74, CSMA in dormant per col. 4 lines 21-67

Claim Objections

5.0 Claims 9, 25, 29-30, 36-36, 41, 44-46, 59-60, 64-66, & 70-71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Response to Amendment

6.0 Applicant's arguments with respect to claim 1-74 have been considered but are moot in view of the new ground(s) of rejection. Please refer to the above rejection for details.

Conclusion

7.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert W Wilson
Examiner
Art Unit 2661

RWW
5/19/05



PHIRIN SAM
PRIMARY EXAMINER